

Application No. 10/669,769
Response to Office Action of January 17, 2007

Atty. Docket No. 042390.P11022C
TC/A.U. 2185

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Remarks

APR 17 2007

The Applicant respectfully requests reconsideration of the present U.S. Patent application as amended herein. Claims 1, 7, and 12 have been amended. Claims 10 and 14 have been cancelled. No claims have been added or withdrawn in this response. Thus, claims 1-9, 11-13, and 15 remain pending in the application.

Claim Rejections § 102

Claims 1-5, 7, 9, and 12-13 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,725,945 issued to Kronstadt et al. (*Kronstadt*). The Applicant respectfully submits that claims 1-5, 7, 9, and 12-13 are not anticipated by 1-5, 7, 9, and 12-13 for at least the reasons set forth below.

The Manual of Patent Examining Procedure ("MPEP"), in § 2131, states:

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. V. Union Oil Co. California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 869 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Thus, under 35 U.S.C. § 102, a claim is anticipated *only if* each and every element of the claim is found in the cited reference and the cited reference must show the invention in as complete detail as contained in the claim.

Amended claim 1 recites:

Application No. 10/669,769
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TC/A.U. 2185

A cache comprising:
each a plurality of arrays of memory cells, the arrays being arranged in banks,
bank including regular arrays and a redundant array;
a bus having data lines to carry data from the regular arrays
the redundant array; and
circuitry to couple a first set of data from the regular array to
a first set of the data lines and to connect a second set of data
from the regular array and the redundant array to a second set of
the data lines
wherein each of the regular arrays and the redundant array have one or more associated control bits to determine a direction in which data is output, and further wherein the cache is fabricated on a common die with a processor.

(Emphasis added). Independent claims 7 and 12, as amended, similarly recite "wherein each of the regular arrays and the redundant array have one or more associated control bits to determine a direction in which data is output, and further wherein the cache is fabricated on a common die with a processor."

The Office action directs the Applicant's attention to *Kronstadt* which is directed to a distributed cache in dynamic RAMs (see, e.g., the Abstract). *Kronstadt*, however, does not disclose that "each of the regular arrays and the redundant array have one or more associated control bits to determine a direction in which data is output," as recited in claims 1, 7, and 12. In addition, *Kronstadt* does not disclose that "the cache is fabricated on a common die with a processor," as recited in claims 1, 7, and 12. In fact, the distributed cache of *Kronstadt* teaches away from co-locating the cache and the processor on the same die by disclosing that the "term 'distributed' emphasizes ... the d-cache is not tightly coupled to the CPU but is on the memory side of the system ..." (column 3, lines 4-8). For at least the above-stated reasons, the Applicant submits that *Kronstadt* does not anticipate claims 1, 7, and 12.

Application No. 10/669,769
Response to Office Action of January 17, 2007

APR 17 2007

Atty. Docket No. 042390.P11022C
TC/A.U. 2185

Claims 2-5 depend from claim 1. Claim 9 depends from claim 7. Claim 13 depends from claim 12. For at least the reason that dependent claims include the limitations of the claims from which they depend, the Applicant respectfully submits that claims 2-5, 9, and 13 are not anticipated by *Kronstadt*.

Claim Rejections § 103

Claims 10 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over *Kronstadt* in view of U.S. Patent No. 6,769,081 issued to Parulkar (*Parulkar*). Claims 10 and 14 have been cancelled without prejudice and, thus, the rejection of claims 10 and 14 is moot.

Conclusion

The Examiner is respectfully requested to contact the undersigned by telephone if such contact would further the examination of the present application.

Respectfully submitted,

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